Features:

Currently, the application has two phases. The first phase is to view the introduction of buildings in north campus and choose a building as the base, and the second phase is to play the tower defense game in which the user should defend the base chosen in the previous phase from incoming monsters by placing towers along the path.

**First phase:**

1. Start game page

User can choose to watch a tutorial or start the game. Once the user chooses to start the game, they will be directed to a page that has the introduction of buildings where they can choose their base.

1. Choose base page

A map of the north campus is shown on the screen. The exact building will be contoured when user hovers on it. If the user clicks the specific building, an introduction window will be popped out showing the photo of this building as well as its property. **This functionality limits to the EECS building for the prototype.**

1. Choose it as the base.

In the introduction window, the user can choose the building as base.

**Second phase: Play the game once!**

1. Information panel.

A panel displaying the name of the base, as well as the current scores and the current money of the user is shown on the right side of the gameplay screen. The initial money owned by the user is set to $300.

1. Buy Tower.

Users can buy the tower in the power shop below the gameplay screen using their current money, whose amount is displayed on the information panel. The prices of each towers are listed, and if the user doesn’t have enough money, a warning will be displayed at the information panel on the right of the gameplay screen. The user can return the tower by clicking the “return” button before placing it on the map, and the corresponding amount of money will also be returned.

1. Place Tower.

After successfully buying the tower, user can place the tower on the map. The available grid will be highlighted to orange as the user hovers through the map. By clicking on the selected grid, a tower can be placed.

1. Generate attacking waves:

After a tower is placed, it starts to generate attacking waves. Towers with higher price normally have larger attack range and can cause more hurt on monsters. When the wave generated by a tower overlaps with the monsters, the monsters will be hurt(the amount of the blood of monsters will be decreased).

1. Gain money and scores:

A user will be rewarded money and scores every time a monster is killed, which will be displayed on the information panel.

1. Moving monsters:

Monsters will be generated at some certain rate, and will be moving according to some routes toward the base. If the monster approaches the base before it is killed, the HP value of the base will be decreased.